

Bat Surveys Report

Carried out on behalf of Build Group

Site: Farmers Arms Moorfield Tower Hill Kirkby
Knowsley L33 1XD

23/02015/FUL

Prepared by:
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1. Introduction

1.1 Site description, location, and context

The site is located within Simonswood area in Kirkby in a semi urban environment and enclosed by existing residential land uses. The habitat on site comprises of a building, including areas of hard standing.

1.2 Purpose, aims and objectives of this report

The Bat Roost Assessment indicates in section 3.0 and 5.0:

“Whilst the main building has extensive fire damage the remaining existing building does have numerous external preliminary roost features that could be used by bats but excludes a loft space (that could sustain a roost of conservation concern). The building has had some permanency in the landscape and is connected to greenspaces which act as good foraging ground. Landscape connectivity for foraging extends to the adjacent rail line, woodland and pond habitat.

The main building has a moderate roost suitability because of the number of PRF and the buildings position in the wider landscpae and therefore two survey visits will be required”.

The purpose of this report is therefore to establish use of the building for bats by means of surveys. This survey shall be carried out at the identified points of potential entry or shelter for bat species identified in the BRA. We shall aim to establish absence or presence on the development site in reference to the use of the building by bats. The objective of the report is to be able to assess the bat use in the building, the impact of construction and any applicable mitigation measures in relation to the extent and use of the site by bats.

2. Methods

2.1 Summary of survey methods

The BCT January 2016 good practice survey guidelines shall be used to design and inform the survey effort with particular regard to section 7.1 page 49-52. The BCT January 2016 good practice survey guidelines recommend a minimum survey effort for buildings with moderate potential to support roosting bats of a dusk emergence and a pre-dawn re-entry survey. During the survey surveyors were positioned to observe the building. The survey was undertaken in good weather conditions and during the optimal season for bat activity. Generally, the surveyors record weather and all bat activity including the number of bats emerging / passes, species detected, behaviour for example feeding or commuting, flight direction and any relevant comments. Each surveyor used an Echo Meter Touch and a BatBox Duet/Elekon detector. There were no weather or HS related constraints and all bats were detectable with the equipment used. Each surveyor was placed so as to have an unobstructed view of elevations on the building to as to be able to view all parts of the potential roost features. Surveyor positions allowed for coverage of all identified features in the initial report.

2.2 Pre Survey data search

The nearest EPS approved license is 3.1km from site.

2.3 Surveyor information

Simon Brain (Managing Director) has attained a Post Graduate Certificate in Biological Recording and has attended FSC Field Courses for Land mammals, Songbird identification, Barn Owls (CIEEM) and Advanced Bird Survey Techniques (Level M). He has four years experience in bat and avian work. He has accumulated over 450 hours of bat contact time and holds an NE Class 2 license (70619:OTH:CSAB:2016). He has attended courses for trees and bats, bat survey techniques, mitigation and handling and attended seven european workshops. Dawn Good fellow is an experienced senior ecologist with a number of years of bat experience and an accredited agent on the above license number. Remaining surveyors have a number of years of bat surveying experience.

3. Emergence Survey - Results

3.1 Dusk emergence results

Summary

No bats were seen to emerge from the building and it was considered that bats and bat roosts were absent from the building during the survey.

Detailed survey records

Site: The Farmers Arms, Kirkby - Visit 1 of 2 (dusk)

Date: 11/09/23

Lead Surveyor: DG

Conditions/Wind - Start: Dry, 100% cloud cover, 4 mph SE, 85% humidity, 1,013hPa

Conditions/Wind - End: Occasional drizzle, 100% cloud cover, 2 mph SSW, 90% humidity, 1,013hPa

Sunset: 19:37hrs

Start time: 19:07hrs

End time: 21:37hrs

Temperature - Start: 17°C

Temperature - End: 17°C

Surveyor: Tracey Minogue - positioned at N corner (EMT 2 used)

Time (hrs)	Species	Comment
20:07	Noctule	Bat heard but no visual.
20:17	C. Pip	Bat heard and observed passing near N corner of building, from N to S.

Surveyor: Spencer Dwyer Moss-Rathbone - positioned at NE elevation (EMT 2 used)

Time (hrs)	Species	Comment
19:58	Noctule	Bat heard but no visual.
20:07	Noctule	Bat heard but no visual.

Surveyor: Bobby Moss-Rathbone - positioned at E corner (EMT 2 used)

Time (hrs)	Species	Comment
19:40	Noctule	Bat heard but no visual.

Surveyor: Dawn Goodfellow - positioned at S corner (EMT 2 used)

Time (hrs)	Species	Comment
20:07	Noctule	Bat heard but no visual.
20:16	C. Pip	Bat heard but no visual.
21:16	C. Pip	Bat heard but no visual.

Surveyor: Jamie-Lee Hodgson - positioned at SW elevation (EMT 2 used)

Time (hrs)	Species	Comment
20:07	Noctule	Bat heard but no visual.
20:36	Noctule	Bat heard but no visual.
21:16	C. Pip	Bat heard but no visual.

Surveyor: Ryan Whitmarsh - positioned at W corner (EMT 2 used)

Time (hrs)	Species	Comment
20:07	Noctule	Bat heard but no visual.
20:34	Noctule	Bat heard but no visual.
20:58	C. Pip	Bat heard but no visual.

No bats were observed to emerge from the building.

Site: The Farmers Arms, Kirkby - Visit 2 of 2 (dusk)

Date: 25/09/23

Lead Surveyor: DG

Conditions/Wind - Start: Dry, 100% cloud cover, 4 mph SE, 85% humidity, 1,013hPa

Conditions/Wind - End: Occasional drizzle, 100% cloud cover, 2 mph SSW, 90% humidity, 1,013hPa

Sunset: 19:37hrs

Start time: 19:07hrs

End time: 21:37hrs

Temperature - Start: 17°C

Temperature - End: 17°C

Surveyor: Graham Short - positioned at N corner (EMT 2 used)

Time (hrs)	Species	Comment
19:37	C. Pip	Bat heard but no visual.

Surveyor: Mike Bazley - positioned at NE elevation (EMT 2 used)

Time (hrs)	Species	Comment
		No bats heard or observed.

Surveyor: Tracey Minogue - positioned at E corner (EMT 2 used)

Time (hrs)	Species	Comment
19:59	C. Pip	Bat heard but no visual.

Surveyor: Dawn Goodfellow - positioned at S corner (EMT 2 & Night Fox Whisker used)

Time (hrs)	Species	Comment
19:37	C. Pip	Bat heard but no visual.
19:42	C. Pip	Bat heard but no visual.
19:53	C. Pip	Bat heard (feeding) but no visual.
21:13	Noctule	Bat heard but no visual.

Surveyor: Jamie-Lee Hodgson - positioned at SW elevation (EMT 2 used)

Time (hrs)	Species	Comment
19:37	C. Pip	Bat heard but no visual.
19:42	C. Pip	Bat heard but no visual.
19:53	C. Pip	Bat heard (feeding) but no visual.

Surveyor: Ryan Whitmarsh - positioned at W corner (EMT 2 used)

Time (hrs)	Species	Comment
19:37	C. Pip	Bat heard but no visual.
19:43	C. Pip	Bat heard but no visual.

No bats were observed to emerge from the building.

4. Constraints and legislation

4.1 Constraints on survey information or equipment

The first survey has been carried out in the recognised bat survey season. The second survey was carried out in good weather conditions with suitable temperatures for the survey to be considered valid. A single nighttime low of 9 degree was recorded between the first and second surveys with an average night time low of 12/13 degree between surveys. In addition bats were recorded on all surveys as commuting and therefore the animals were active and if they had been roosting in the building this would have been identified during the surveys. It is considered that no constraints were applicable given suitable weather conditions prevailed during surveys.

4.2 Potential impacts of development

All UK bat species and their roosts (occupied or unoccupied) are legally protected and demolition of a roost site is a criminal offence.

4.3 Legislation and Policy guidance

All bats are European Protected Species as defined by Bern and Bonn Conventions, Conservation of Habitats and Species regulations 2010, Habitats Directive Annex 4, some are also Annex 2.

All bats are protected by domestic legislation including Schedule 5 of the Wildlife and Countryside Act 1981 as amended, CROW and NERC Act 2006.

5. Recommendations and mitigation, compensation and enhancement measures

5.1 Further survey effort

In relation to the existing building and in accordance with the BCT good practice guidelines February 2016 and 2023. The 2016 BCT guidelines have been updated and were issued for use before the second survey was conducted and as the new guidelines do not routinely recommend dawn surveys the second survey for this site is a dusk survey. Therefore the second survey is considered to accord with the 2023 BCT guidelines.

Absence of bats has been established by means of the bat survey and therefore further surveys are not required.

5.2 Mitigation, compensation and enhancement measures

No bats were recorded in the building and therefore no measures are required to mitigate the effects of development on bats in this instance or to compensate for their presence. No roosts were identified during the survey and therefore no EPS license is required for development to commence.

Enhancement measures

There is no loss of any roost type on the site and no roosts were discovered on survey. The site is being used for regular commuting and feeding. Specific mitigation for loss of foraging and commuting routes is not required. Under the National Planning Policy Framework 2012 and the NERC Act 2006 there is a requirement to improve existing environment through enhancement.

The development proposals can maintain the ecological connection between the site and the locality. Where new planting is to be introduced native tree and shrub planting plan is preferred. Species of local provenance are recommended in preference to non-native, ornamental species. Planting of tree and shrub species that support a high insect biomass and provide a potential food source for bats throughout the bat activity period (spring to autumn) such as rowan, silver birch, alder buckthorn, dogwood, crab apple and wild plum are recommended..

Research has found that lighting can cause considerable disturbances to bats and may interfere with bat navigation during nocturnal commuting flights to suitable feeding sites. It is recommended by the Bat Conservation Trust and Institute of Lighting Engineers that lighting at ground level should be below 3 Lux (BCT & ILE 2008). The site was found to be largely unaffected by lighting and the redevelopment will seek to ensure that lighting will be appropriately designed to ensure minimal light spill, particularly on the vegetated boundary of the site. This could be achieved by:

- Ensuring lights are only erected where they are needed, illuminated only during the time period that they will be used, and at levels that enhance visibility.
- Using narrow spectrum bulbs, to lower the range of species affected by lighting, and avoiding the use of light sources that emit ultraviolet.
- Ensuring that there are no bare bulbs or lights that point upwards.
- Ensuring that the spread of light is kept near to or below the horizontal plane.
- Reducing the height of the lighting columns since light at a low level reduces ecological impact.
- Ensuring only low level lighting that is as directional as possible is provided and that light emitted from these fixtures is below 3 lux at ground level.

- LED lighting, ideally amber LED (bat-lamps) that have a negligible UV component may be a preferred option since these show a low insect attractiveness comparable to low pressure sodium lamps and they are more directional, thus reducing light spill
- Where possible, external lights should comprise sensor activated lamps) so that lights are only operational when they are needed.
- Avoiding the illumination of habitat features used by bats, notably the boundary tree and linear hedgerows.

5.3 Mitigation licenses

In relation to the building there are no requirements for mitigation licensing as there is no requirement for anyone to carry out activity prohibited under wildlife legislation.

6. Summary

- 6.1 No bats were found to be roosting in the building. As a result, no measures are required to mitigate the effects of development on bats and there is no requirement for an EPS license (derogation or low impact) from Natural England in this instance.